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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 09/993,578 | 11/06/2001 | George A. Polk | 16159.029001; P6714 | 8673 |

22511 7590 03/09/2005

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|---|---|
| CHU, GABRIEL L | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2114 | |

DATE MAILED: 03/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 09/993,578 | POLK, GEORGE A. | |
| | Examiner | Art Unit | |
| | Gabriel L. Chu | 2114 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *05 January 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-12 and 21-31* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12 and 21-31* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *20050110*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 1-5, 8, 10, 11, 31 rejected under 35 U.S.C. 102(a) as being anticipated by "Software Verification and Functional Testing with XML Documentation" by Friedman-Hill (herein FH). Referring to claims 1, 31, FH discloses a method of testing an a method of testing an embedded example, comprising: extracting the embedded example from documentation (From page 5, "program which parses the documentation".); creating a test suite from the embedded example (From page 5, "Code examples in software documentation should always be tested for proper compilation..."); selecting a tool against which to execute the test suite (From page 7, "...the test harness..."); executing the test suite against the tool to generate an output response (From page 5, "...they can also be executed..."); and comparing the output response of the tool to a golden file (From page 5, "...and optionally, the result verified against a sample output".).

3. Referring to claim 2, FH discloses creating the embedded example using at least one tag chosen from a tag set (From figure 6, <java>. Further, from page 7, <fundtiondef>.).

4. Referring to claim 3, FH discloses creating the golden file using at least one tag chosen from a tag set (From page 4, "4 Functional Testing with XML... These could include sample code to be compiled and expected output.").

5. Referring to claim 4, FH discloses locating a source of error if the output response of the tool varies from the golden file (From page 5, "A test succeeds if none of these stages results in an error.").

6. Referring to claim 5, FH discloses correcting the embedded example if the output response of the tool varies from the golden file (From page 4, "...ensure that all of the examples in the documentation represent the actual behavior of the software".).

7. Referring to claim 8, FH discloses the test suite is created by interpreting a tag set (From page 4, "4 Functional Testing with XML... These could include sample code to be compiled and expected output.").

8. Referring to claim 10, FH discloses the golden file comprises a proper output response of the tool executing the test suite (From page 4, "4 Functional Testing with XML... These could include sample code to be compiled and expected output.").

9. Referring to claim 11, FH discloses the golden file is created manually (From page 4, "3.3 Writing Documentation with XML...").

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11. Claims 6, 7 rejected under 35 U.S.C. 103(a) as being unpatentable over "Software Verification and Functional Testing with XML Documentation" by Friedman-Hill as applied to claim 1 above, and further in view of "'Executable' Documentation: Testing the Documentation Documenting the Testing" by Ballard. Referring to claims 6 and 7, although FH does not specifically disclose comparison results can be displayed or stored, displaying and storing comparison results is known in the art. An example of this is shown by Ballard, from page 2, "If discrepancies are found, their presence is made known to the programmer in the same manner as compilation errors, If the passive mode is being employed, the results are stored." A person of ordinary skill in the art at the time of the invention would have been motivated to store and display results because, from page 2 of Ballard, from page 2, "If discrepancies are found, their presence is made known to the programmer", and further, from FH has disclosed a need to correct errors in documentation, from page 4, "...ensure that all of the examples in the documentation represent the actual behavior of the software".

12. Claim 9 rejected under 35 U.S.C. 103(a) as being unpatentable over "Software Verification and Functional Testing with XML Documentation" by Friedman-Hill, as applied to claim 1 above. Referring to claim 9, FH does discloses the use of command lines (see figure 7). Although FH does not specifically disclose a command line may be used to control the tool, the use of command lines for operating applications is notoriously well known in the art. Examiner takes official notice for a command line application. A person of ordinary skill in the art at the time of the invention would have

been motivated to use a command line to control an application because the person is using a command line interface.

13. Claims 12, 30 rejected under 35 U.S.C. 103(a) as being unpatentable over "Software Verification and Functional Testing with XML Documentation" by Friedman-Hill in view of "'Executable' Documentation: Testing the Documentation Documenting the Testing" by Ballard. Referring to claim 12, FH discloses a method of testing an a method of testing an embedded example, comprising: extracting the embedded example from documentation (From page 5, "program which parses the documentation".); creating a test suite from the embedded example (From page 5, "Code examples in software documentation should always be tested for proper compilation..."); selecting a tool against which to execute the test suite (From page 7, "...the test harness..."); executing the test suite against the tool to generate an output response (From page 5, "...they can also be executed..."); and comparing the output response of the tool to a golden file (From page 5, "...and optionally, the result verified against a sample output".), creating the embedded example using at least one tag chosen from a tag set (From figure 6, <java>. Further, from page 7, <fundtiondef>.), creating the golden file using at least one tag chosen from a tag set (From page 4, "4 Functional Testing with XML... These could include sample code to be compiled and expected output."), locating a source of error if the output response of the tool varies from the golden file (From page 5, "A test succeeds if none of these stages results in an error."), correcting the embedded example if the output response of the tool varies from the golden file (From page 4, "...ensure that all of the examples in the documentation

represent the actual behavior of the software".). Although FH does not specifically disclose comparison results can be displayed or stored, displaying and storing comparison results is known in the art. An example of this is shown by Ballard, from page 2, "If discrepancies are found, their presence is made known to the programmer in the same manner as compilation errors, If the passive mode is being employed, the results are stored." A person of ordinary skill in the art at the time of the invention would have been motivated to store and display results because, from page 2 of Ballard, from page 2, "If discrepancies are found, their presence is made known to the programmer", and further, from FH has disclosed a need to correct errors in documentation, from page 4, "...ensure that all of the examples in the documentation represent the actual behavior of the software".

14. Referring to claim 30, FH discloses software instructions to perform: extracting the embedded example from documentation (From page 5, "program which parses the documentation".); creating a test suite from the embedded example (From page 5, "Code examples in software documentation should always be tested for proper compilation..."); selecting a tool against which to execute the test suite (From page 7, "...the test harness..."); executing the test suite against the tool to generate an output response (From page 5, "...they can also be executed..."); and comparing the output response of the tool to a golden file (From page 5, "...and optionally, the result verified against a sample output".), creating the embedded example using at least one tag chosen from a tag set (From figure 6, <java>. Further, from page 7, <fundtiondef>.), creating the golden file using at least one tag chosen from a tag set (From page 4, "4

Functional Testing with XML... These could include sample code to be compiled and expected output."), locating a source of error if the output response of the tool varies from the golden file (From page 5, "A test succeeds if none of these stages results in an error."), correcting the embedded example if the output response of the tool varies from the golden file (From page 4, "...ensure that all of the examples in the documentation represent the actual behavior of the software".). Although FH does not specifically disclose comparison results can be displayed or stored, displaying and storing comparison results is known in the art. An example of this is shown by Ballard, from page 2, "If discrepancies are found, their presence is made known to the programmer in the same manner as compilation errors, If the passive mode is being employed, the results are stored." A person of ordinary skill in the art at the time of the invention would have been motivated to store and display results because, from page 2 of Ballard, from page 2, "If discrepancies are found, their presence is made known to the programmer", and further, from FH has disclosed a need to correct errors in documentation, from page 4, "...ensure that all of the examples in the documentation represent the actual behavior of the software".

Although FH does not specifically disclose performing software verification and functional testing with XML documentation would require a computer system comprising a processor, memory, storage device, and computer display, Examiner takes official notice for these items. A person of ordinary skill in the art at the time of the invention would have been motivated to have these items in a computer because they enable execution of commands and interaction with users, wherein FH has disclosed a need to

correct errors in documentation, from page 4, "...ensure that all of the examples in the documentation represent the actual behavior of the software".

15. Claims 21-25, 28, 29 rejected under 35 U.S.C. 103(a) as being unpatentable over "Software Verification and Functional Testing with XML Documentation" by Friedman-Hill. Referring to claim 21, FH discloses software instructions to perform: extracting the embedded example from documentation (From page 5, "program which parses the documentation".); creating a test suite from the embedded example (From page 5, "Code examples in software documentation should always be tested for proper compilation..."); selecting a tool against which to execute the test suite (From page 7, "...the test harness..."); executing the test suite against the tool to generate an output response (From page 5, "...they can also be executed..."); and comparing the output response of the tool to a golden file (From page 5, "...and optionally, the result verified against a sample output".). Although FH does not specifically disclose performing software verification and functional testing with XML documentation would require a computer system comprising a processor, memory, storage device, and computer display, Examiner takes official notice for these items. A person of ordinary skill in the art at the time of the invention would have been motivated to have these items in a computer because they enable execution of commands and interaction with users, wherein FH has disclosed a need to correct errors in documentation, from page 4, "...ensure that all of the examples in the documentation represent the actual behavior of the software".

16. Referring to claim 22, FH discloses creating the embedded example using at least one tag chosen from a tag set (From figure 6, <java>. Further, from page 7, <fundtiondef>.).

17. Referring to claim 23, FH discloses creating the golden file using at least one tag chosen from a tag set (From page 4, "4 Functional Testing with XML... These could include sample code to be compiled and expected output.").

18. Referring to claim 24, FH discloses locating a source of error if the output response of the tool varies from the golden file (From page 5, "A test succeeds if none of these stages results in an error.").

19. Referring to claim 25, FH discloses correcting the embedded example if the output response of the tool varies from the golden file (From page 4, "...ensure that all of the examples in the documentation represent the actual behavior of the software".).

20. Referring to claim 28, FH discloses the golden file comprises a proper output response of the tool executing the test suite (From page 4, "4 Functional Testing with XML... These could include sample code to be compiled and expected output.").

21. Referring to claim 29, FH discloses the golden file is created manually (From page 4, "3.3 Writing Documentation with XML...").

22. Claims 26, 27 rejected under 35 U.S.C. 103(a) as being unpatentable over "Software Verification and Functional Testing with XML Documentation" by Friedman-Hill as applied to claim 21 above, and further in view of "'Executable' Documentation: Testing the Documentation Documenting the Testing" by Ballard. Referring to claims 26 and 27, although FH does not specifically disclose comparison results can be displayed

or stored, displaying and storing comparison results is known in the art. An example of this is shown by Ballard, from page 2, "If discrepancies are found, their presence is made known to the programmer in the same manner as compilation errors, If the passive mode is being employed, the results are stored." A person of ordinary skill in the art at the time of the invention would have been motivated to store and display results because, from page 2 of Ballard, from page 2, "If discrepancies are found, their presence is made known to the programmer", and further, from FH has disclosed a need to correct errors in documentation, from page 4, "...ensure that all of the examples in the documentation represent the actual behavior of the software".

***Conclusion***

23. Applicant's submission of an information disclosure statement under 37 CFR 1.97(c) with the fee set forth in 37 CFR 1.17(p) on 10 January 2005 prompted the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 609(B)(2)(i). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gabriel L. Chu whose telephone number is (571) 272-3656. The examiner can normally be reached on weekdays between 8:30 AM and 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert W. Beausoliel, Jr. can be reached on (571) 272-3645. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

gc

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